received 6/26

Calusa Green, LLC
Application for Planned Development Rezoning

Narrative Addressing Rezoning Standards of Approval

a. Whether the proposed change would be contrary to the Comprehensive Plan.

The proposed change will not be contrary to the Comprehensive Plan.

The following Goals, Objectives and Policies apply to this application:

Future Land Use Goals, Objectives and Policies

DEFINITIONS OF FUTURE LAND USE MAP CATEGORIES

AGRICULTURE (AG)
These lands are designated for agricultural activities.
General Range of Uses
Ranching, crop farming including citriculture, silviculture, aquaculture, and row crops, as well as rural residential, rural recreational uses, rural industrial uses and public services and facilities.

The subject property is designated as Agriculture on the Future Land Use Map. Though it will be privately owned, the Calusa Green facility ("Calusa Green") will provide a public service. The Charlotte County Code of Ordinances, which implements the Comprehensive Plan, permits sanitary landfills by special exception in the Agriculture zoning district, which is the appropriate zoning district for properties with Agriculture land use. It is the only zoning district, other than Planned Development, which permits a sanitary landfill.

FLU Policy 1.4.3 Agricultural Primacy
The County shall consider bona fide agricultural operations that have been in existence for at least one year, regardless of crop or agricultural use rotation, and that have been developed on lands designated for agricultural use on the FLUM as having "primacy" over other land uses that may be developed in time. Primacy means that, when conflict arises between agricultural uses and non-agricultural uses, these conflicts will be resolved in favor of the agricultural interests, provided the agricultural interests were established prior to the non-agricultural uses.

Policy 1.4.3 specifically speaks to conflicts that may arise between agricultural and non-agricultural uses. A solid waste management facility, under the 2050 Plan, is considered

an agricultural use. There is no other land use category in which landfills are permitted. Further, the definition of "Land Use" in the 2050 Plan reads as follows:

> The development that has occurred on the land, the development that is proposed by a developer on the land, or the use that is permitted or permissible on the land under an adopted comprehensive plan or element or portion thereof, land development regulations, or a land development code, as the context may indicate. (Emphasis added)

Public services and facilities are a permitted use in Agriculture. Additionally Charlotte County's land development regulations require privately owned solid waste management facilities to be placed only on lands designated as Agriculture in the comprehensive plan. Therefore, by definition, a solid waste management facility is an Agriculture land use.

Policy 1.4.3 is intended to protect agricultural uses from being limited through the encroachment of urban or residential uses that may eventually complain about agricultural activities. Policy 1.3.4 specifically speaks to conflicts between "agricultural interests" and "non-agricultural uses". Regardless of the fact that Policy 1.4.3 does not apply to a landfill, there is nothing inherent in the landfill use that would create a compatibility conflict or diminish the viability of adjacent agricultural operations. The landfill will not create any ground or surface water discharges that negatively impact surrounding agricultural operations. The landfill use itself is also not the type of use that would complain about the off-site impacts that agricultural operations produce, which is what this policy is really trying to protect against.

FLU Policy 2.3.5 Public Water System Wellhead Protection
The County shall evaluate the effects of development on wellheads for all proposed land uses within delineated cones of influence for all central potable water supply wellheads used for public consumption (FLUM Series Map #7). Where a cone of influence is not determined, all proposed development within 1,500 feet of the wellhead will be evaluated. Land uses in which hazardous materials, such as petroleum products, chemical or biological wastes, are produced or stored are not permitted to adversely impact groundwater resources. Landfills, wastewater treatment facilities, or feedlots/concentrated animal facilities are prohibited.

Calusa Green is not located within a determined cone of influence of a central potable water supply wellhead. The closest well serving a public water system is approximately 2.7 miles from the subject property at the Paradise Park mobile home community.

FLU Policy 2.3.6 Groundwater Protection
The County shall require commercial and industrial uses to be developed without the contamination of groundwater and shall not permit land uses in which hazardous materials, such as petroleum products, chemical or biological wastes, are produced or stored in areas where their presence would adversely impact groundwater resources, recharge areas (FLUM Series Map #6), or watersheds that drain into surface water supplies (FLUM Series Map #4).

The solid waste management facility will neither contaminate nor adversely impact groundwater, surface water, recharge areas or watersheds that drain into surface water supplies, as provided in the proposed stormwater management system design and detailed in the Hydrogeological Investigation Report prepared by Progressive Water Resources (Exhibit 16). The wet detention stormwater management system for the landfill and associated site improvements will be designed to exceed the rules of the Florida Department of Environmental Protection, specifically Chapter 62-330.200(3), FAC. Pursuant to the requirements of the South Florida Water Management District, the stormwater management system will be designed to retain the 100-year, 72-hour storm event with no surface discharge to surface waters. In addition, the stormwater management system can accommodate the 500-year, 24-hour storm event with four foot of freeboard. Emergency spillways to protect the system from overtopping will be designed to discharge into the contained wetland system north of the site. In the rare event of a stormwater discharge, it must meet state surface water quality standards. The perimeter berms will be designed with adequate freeboard to prevent overtopping from waves generated by a 120 mile per hour wind on top of the design stage, at a minimum.

There will be no adverse impact to recharge areas or watersheds. Information derived from the Charlotte County Comprehensive Plan Future Land Use Element, Map No. 6: Prime Aquifer Recharge Areas designates the Calusa Green Project Site within the area shown as "No recharge to very low recharge (0.0 to 1.0 inches per year) to the Upper Florida Aquifer". Localized information detailed in both the Hydrogeological Investigation Report prepared by Progressive Water Resources (Exhibit 16) and the narrative at Exhibit 16-1 confirms the vicinity of the subject site is likely to provide virtually "no recharge" to the upper Floridan Aquifer.

FLU Policy 3.2.1 Preserving Rural Character
The County shall preserve and protect rural character within the Rural Service Area by requiring that all future development activities within this Area preserve, support, and enhance the fundamental elements of rural character. It is not the obligation of residents and businesses (agriculture being considered a business) in a rural area to change and conform to the needs and character of new development but rather the obligation of the new development to seamlessly integrate into the existing character of the rural location.

FLU Policy 3.2.2 Elements of Rural Character
Rural character is denoted by:

1. Open space where the natural landscape and vegetation predominate over the built environment.

2. Visual landscapes that are traditionally found in rural areas, such as row crops, pasture, woodlands, barns, and fences.

3. Uses that are compatible with terrestrial and aquatic wildlife habitat and the continued use of that habitat by the wildlife.

4. Uses that are consistent with the protection of natural surface water flows and ground water and surface water recharge and discharge areas.

5. Intermittent concentrated village and hamlet style developments surrounded by large open spaces.

6. Uses that generally do not require an extension of urban governmental services:

- ***a. Large and small scale farming;***
- ***b. Scattered agricultural industry;***
- ***c. Sporadic commercial retail uses that serve the social and economic needs of the residents;***
- ***d. Very low density development.***

Similar to Policy 1.4.3, the intent of Policy 3.2.1 is to protect rural and agricultural uses from the encroachment of non-rural, urban uses. These non-rural uses include Cluster Subdivisions and Rural Mixed Use communities. This policy directs that those otherwise urban uses "fit in" with the rural community so as to not change the surrounding character.

The solid waste management facility is, by definition, an agricultural land use as Agriculture is the only land use category in which a privately owned solid waste management facility is permitted and the land development regulations require privately owned solid waste management facilities to be placed in lands designated as Agriculture by the comprehensive plan. Similar to the existing Zemel Road Landfill, the proposed landfill will fit in with the surrounding agricultural and rural community.

Surrounding residents and other agricultural businesses will not in any way face pressure to "change and conform to the needs and character" of the proposed landfill, just as that has not been the case with the existing Zemel Road Landfill.

Agricultural uses are not required to meet all of the characteristics of Policy 3.2.2 (for example, a citrus grove does not meet #1, #3, #4 or #5). Policy 3.2.1 requires only that a proposed use fits in with Rural Character. The proposed landfill will not negatively impact any of the characteristics of rural character specifically. More importantly, because the landfill will not require the extension of urban services, consistent with the definition of Rural Character (#6), the siting of the landfill will not encourage the conversion of the Agricultural area to non-rural uses.

Additionally, over twenty percent (20%) of the site will be retained as open space during the life of the landfill and the site will transition from citrus cultivation to a landfill in phases over a thirty (30) year period.

Finally, the County's ordinances implement, and must be consistent with the County's comprehensive plan. The County's ordinances require privately owned solid waste management facilities to exclusively locate in lands designated as Agriculture by the comprehensive plan. There is, therefore, a presumption that such use is consistent with the Agriculture land use designation and with the various goals, policies and objectives relating to the use and development of Agriculture lands.

FLU Policy 3.2.5 Support Economic Viability of Agricultural Lands
The County shall preserve the economic viability of agricultural lands and prevent the premature conversion of these lands to other uses to ensure that the County experiences no substantial loss of agricultural productivity.

The Comprehensive Plan states that Agriculture lands are designated for agricultural activities and identifies, among the general range of such agricultural uses, public services and facilities such as landfills. Thus, by the language of the Comprehensive Plan, the subject property will be converting from one type of agricultural use to another. Further, the site, which has historically been used for citrus cultivation has been fallow for several years as a result of the State of Florida's citrus canker eradication plan. The site will transition from citrus cultivation to a landfill in phases over a thirty (30) year period. Unlike the encroachment of urban uses in an Agriculture area, the landfill will not create development pressure on surrounding properties, causing the premature conversion of other Agriculture areas.

This policy must also be read in conjunction with FLU Objective 1.4 Protection of Private Property Rights which reads:

> To recognize and respect existing private property rights, including the right to farm, and to consider such rights and the impact upon them when preparing recommendations for land use decisions.

Under FLU Objective 1.4, a property owner should have the right to utilize its property for all lawful uses, particularly for a use that is required by County ordinance to be placed on lands with Agriculture land use. Surely it is not the intent of FLU Policy 3.2.5 to prevent an agricultural owner from converting its property to a new agricultural use. In this instance, Calusa Green is a partnership of Calusa Growers, LC and Southwest Green, LLC. In addition to the proposed Calusa Green site, Calusa Growers owns almost 1500 surrounding acres that will continue to be utilized for citrus cultivation. Calusa Growers, LC seeks to exercise its private property rights to convert a portion of its property from a permitted crop-based agricultural use to a permitted non-crop-based agricultural use.

Natural Resources Goals, Policies and Objectives

ENV Objective 1.4 Water Quality
To ensure that human health and the natural environment are not damaged by water contamination.

ENV Policy 1.4.1 Water Quality Standards
The County shall not allow the quality of Charlotte County's groundwater and surface water resources to be degraded, either directly or indirectly by human influences, below the minimum criteria for water quality provided in Chapter 62 FAC, the Clean Water Act, 3 USC 1251., or by adopted Site Specific Alternative Criteria (62-302.800 FAC), and shall ensure that it is maintained or, as necessary, improved to ensure the availability of this resource for present and future generations.

The landfill will neither contaminate nor adversely impact either groundwater or surface water as provided in the proposed stormwater management system design and detailed in the Hydrogeological Investigation Report prepared by Progressive Water Resources (Exhibit 16). The wet detention stormwater management system for the landfill and associated site improvements will be designed to exceed the rules of the Florida Department of Environmental Protection, specifically Chapter 62-330.200(3), FAC. Pursuant to the requirements of the South Florida Water Management District, the stormwater management system will be designed to retain the 100-year, 72-hour storm event with no surface discharge to surface waters. In addition, the stormwater management system can accommodate the 500-year, 24-hour storm event with four foot of freeboard. Emergency spillways to protect the system from overtopping will be

designed to discharge into the wetland system north of the site. In the rare event of a stormwater discharge, it must meet state surface water quality standards. The perimeter berms will be designed with adequate freeboard to prevent overtopping from waves generated by a 120 mile per hour wind on top of the design stage, at a minimum.

ENV Policy 1.4.9 Watershed Overlay District (WOD)
The County shall establish the Watershed Overlay District as illustrated on FLUM Series Map # 4. The intent of the WOD is to protect the quantity and quality of water within the Hendrickson Dam Reservoir, which is the City of Punta Gorda's potable water supply. Since all overground and underground waters within the watersheds of Shell Creek and Prairie Creek drain into the reservoir, those watershed perimeters shall constitute the boundary of the of the Overlay. The creek system is delineated along with the boundaries of two significant water sources, Long Island Marsh and Tippen Bay.

1. The following shall apply throughout the entire Overlay:

As noted in the Hydrogeological Investigation Report (Exhibit 16), the site is located within the lower portion of the Peace River Basin and within the local watersheds of both Prairie and Shell Creek, which drain to the Peace River and ultimately Charlotte Harbor. The site is actually within the sub-basins of Myrtle Slough (Shell Creek Watershed) and Cow Slough (Prairie Creek Watershed). However, it appears that most of the surface water drains to the north-northeast, around the southern perimeter of the Long Island Marsh, via the Montgomery Canal. Montgomery Canal, a Class III waterbody, drains into Cow Slough and eventually into Prairie Creek, a Class I waterbody.

a. By right uses shall be those allowed by the comprehensive plan.

The subject property is designated as Agriculture on the Future Land Use Map. The Comprehensive Plan allows public services and facilities, such as the proposed landfill, within lands designated with Agriculture land use. Consequently, the landfill is a use permitted by right.

b. All agricultural and resource conservation uses are encouraged to utilize Best Management Practices as created by the Florida Department of Environmental Protection, The Florida Department of Agriculture and Consumer Services, and the Florida Division of Forestry, as applicable. The County shall support and assist, as possible, in the Facilitating Agricultural Resource Management Systems (FARMS) projects and the Federal Environmental Quality Incentives Program (EQIP).

The Florida Department of Environmental Protections has not adopted Best Management Practices for facilities like Calusa Green. However, Chapter 62-701, F.A.C. does contain specific operation requirements that address all aspects of landfill operation including, but not limited to, personnel training, operating plans, waste handling, leachate management, gas monitoring and stormwater management. The Calusa Green facility will meet the conditions for permit issuance and demonstrate compliance with the FDEP's operation requirements as part of its permitting process.

c. The generation or transmission of petroleum products or other hazardous substances is prohibited. The storage and use of such products as incidental to a permitted use are allowed (the exemption shall not be construed to relieve these activities from compliance with applicable State and Federal regulations pertaining to the installation and use of hazardous substances). An exemption may also be made for biofuel generation manufacturing operations when in conjunction with an agricultural operation that utilizes Best Management Practices.

Calusa Green will neither generate, transmit nor store petroleum products or other hazardous substances. Calusa Green is not located within one-half mile of the Shell Creek or Prairie Creek systems and within Long Island Marsh or Tippen Bay, therefore the restrictions for these areas are not addressed. Calusa Green is not within 200 feet of the mean high water mark of Shell Creek or Prairie Creek, therefore the restrictions for these areas are also not addressed.

ENV Policy 1.4.13 Aquifer Recharge Protection
Within Charlotte County's Prime Aquifer Recharge Area, as identified on Future Land Use Map Series Map #6, the County shall prohibit the generation or transmission of petroleum products or other hazardous substances. The storage and use of such products as incidental to a permitted use are allowed (the exemption shall not be construed to relieve these activities from compliance with applicable State and Federal regulations pertaining to the installation and use of hazardous substances). The County shall further protect its aquifer recharge area by requiring properties to develop in accordance with the guidelines of the Groundwater and Aquifer Recharge subelement of the Infrastructure element, AQR Policies 1.1.1 and 1.1.2.

Information derived from the Charlotte County Comprehensive Plan Future Land Use Element, Map No. 6: Prime Aquifer Recharge Areas designates the Calusa Green Project Site within the area shown as "No recharge to very low recharge (0.0 to 1.0 inches per year) to the Upper Florida Aquifer". By definition, therefore, if the site is in an area of no to very low recharge, the map cannot be interpreted to state that the property is in a "prime" recharge location. Localized information confirms the vicinity of

the subject site is likely to provide virtually "no recharge" to the upper Floridan Aquifer. See the narrative at Exhibit 16-1 describing aquifer recharge in Charlotte County.

In addition, the area within northeastern Charlotte County designated on Map No. 6 as having "no recharge to very low recharge" is approximately 5,860,791 acres in size. Using this area, the 554 acre Calusa Green Project Site represents approximately 0.0095 percent, and is therefore considered to be de minimus. In summary, the project will have virtually zero impact to the recharge of the upper Floridan. This determination is based upon objective hydrogeologic and hydrologic information collected by Progressive Water Resources, LLC (PWR), a Florida Registered Professional Geology firm. The information is contained in the Hydrogeological Investigation Report included at Exhibit 16.

Further, Calusa Green will not generate or transmit petroleum products or other hazardous substances.

ENV Policy 2.2.4 Limitation on Land Use Changes
The County may deny increases in density or intensity of land use if it can be determined that such a change would be harmful to natural resources. This would include, but is not limited to, harmful impacts to listed flora and fauna, imperiled and rare communities, water quality and quantity, historic flowways and other such resources. Impacts to wetlands shall be processed as described by ENV Objective 3.1 and associated policies.

The applicant has provided species assessments, hydrogeotechnical studies, enhanced stormwater design, a comprehensive operations manual and detailed responses to specific comprehensive plan goals, policies and procedures that address impacts to flora and fauna, imperiled and rare communities, water quality and quantity and other such resources (the site does not contain any historic flowways) both on and off the subject property. The studies, operating plans and procedures and the state-of-the art design support a finding that the proposed solid waste management facility will not have a harmful impact to flora and fauna, imperiled and rare communities, water quality and quantity or other such resources.

ENV Policy 2.3.2 Listed Species Surveys
When it is determined that properties undergoing development review contain habitat that may be utilized or is utilized by listed species, the County shall require surveys per the methods set by FFWCC or USFWS. Charlotte County shall withhold development approval for properties until all applicable State and Federal permits pertaining to such listed species have been obtained and copies provided to Charlotte County.

Protected species which could potentially utilize the site are addressed in the Protected Species Assessment (Exhibit 8), conducted in accordance with Florida Fish and Wildlife Conservation Commission (FWC) guidelines. No evidence of species utilization of the subject property which would require permits from the FWC or United States Fish and Wildlife Service (FWS) were observed during the Protected Species Assessment.

The following (taken directly from the FWC website) outlines the survey requirements:

> Surveys should be completed only by qualified biologists with documented observation and identification of each species to be surveyed. Surveys should be recorded on a map (1"=400') with pedestrian transects, observation point, trap grids, herpetofaunal arrays, and other sampling plot locations. Protection measures, conservation efforts, mitigation for offsetting impacts and other survey result information should be included in a final report following suggested reporting guidelines. A preliminary general assessment should be conducted whereby at least 15% of the area covered by each habitat type should be surveyed for each potentially occurring species. Depending on the species potential occurrence, a species-specific survey should be conducted by qualified wildlife biologists or ecologists with documented experience of known occurrences and habitat requirements.

The March 2011 protected species assessment was completed in accordance with FWC and FWS guidelines. In fact, the survey covered more than the 15% which FWC guidelines suggest, since approximately 80% of the site was surveyed.

No state or federal permits pertaining to listed species will be required as a result of development of this site.

ENV Policy 2.3.3 Protecting Imperiled Habitat on Private Lands
During the site plan review process, the County shall require avoidance, minimization and property mitigation of the effects of development on rare and imperiled natural communities. As one method of implementing this policy, any properties undergoing development that contain a rare or imperiled community shall set aside the amount of land required by the Open Space/Habitat Reservation Land Development Regulation for preservation.

Rare and Imperiled Communities are depicted on Map #50 of the Supporting Policy and Analysis Map Series. Staff has stated: "There are lands and waterbodies adjacent to and near the site that are considered rare and imperiled natural communities." Calusa

Green has been asked to "Explain how the proposed use will avoid, minimize and mitigate impacts on these communities." Based on this map, virtually every piece of property within Charlotte County can be described as having "lands and waterbodies adjacent to and near the site that are considered rare and imperiled natural communities." The 2050 Plan does not define "imperiled habitat"" or "rare or imperiled natural community." The terms are also not defined in the Charlotte County Code of Ordinances. Map #50 is not identified in ENV Policy 2.3.3.

The applicant notes that the Calusa Green site itself, does not appear to contain any of the habitat communities identified on Map #50. It is also noted that the County's Zemel Road Landfill also has lands and waterbodies adjacent to and near the site that are considered rare and imperiled natural communities, yet when the Zemel Road Landfill recently added a privately operated biosolids composting facility, the operator was not required to address ENV Policy 2.3.3 as part of its Site Plan Review.

The proposed solid waste management facility will not impact any off-site natural communities. The facility will neither contaminate nor adversely impact either groundwater or surface water as provided in the proposed stormwater management system design and detailed in the Hydrogeological Investigation Report prepared by Progressive Water Resources (Exhibit 16).

The wet detention stormwater management system for the landfill and associated site improvements will be designed to exceed the rules of the Florida Department of Environmental Protection, specifically Chapter 62-330.200(3), FAC. Pursuant to the requirements of the South Florida Water Management District, the stormwater management system will be designed to retain the 100-year, 72-hour storm event with no surface discharge to surface waters. In addition, the stormwater management system can accommodate the 500-year, 24-hour storm event with four foot of freeboard. Emergency spillways to protect the system from overtopping will be designed to discharge into the contained wetland system north of the site. In the event of a stormwater discharge, the discharge will meet state surface water quality standards, as required by law. The perimeter berms will be designed with adequate freeboard to prevent overtopping from waves generated by a 120 mile per hour wind on top of the design stage, at a minimum.

The Operations Manual provided at Exhibit 17 details the procedures that will be utilized to control litter, dust, noise and pests.

The Calusa Green project will not include any activities that produce adverse effects on the temperature, motion or humidity of the atmosphere.

ENV GOAL 3 WETLANDS

Avoid, minimize, or mitigate impacts to wetlands by restoration, enhancement, creation or local wetland mitigation banking, when available.

The subject parcel contains five (5) isolated jurisdictional wetlands totaling 13.95+/- acres. The locations of these wetland habitats are shown on the accompanying Florida Land Use Cover and Forms Classification System (FLUCCS) Map included within the Environmental Assessment Report enclosed as Exhibit 8. Wetlands W-1, W-2, W-3 and W-5 (please refer to the attached Wetland Impact/Preserve Map at Exhibit 8) have been historically impacted by decades of agricultural practices on-site with no adjacent natural upland buffers; exhibiting significant coverage by exotic/nuisance vegetation (primarily cattail, primrose willow, torpedo grass and Brazilian pepper) and substantially altered hydrology resulting from the agricultural ditching on site. In addition, it appears that portions of the wetlands were previously impacted and converted into agricultural areas as evidenced by the unnatural shape of the remnant wetland areas.

In accordance with Comprehensive Plan policy 3.1.3 – Wetland categories, all of the wetlands on site will be classified as Category II wetlands based on the lack of meeting two of the criteria outlined below for a Category I system.

ENV Objective 3.1 Wetland Protections
To protect wetlands and the natural functions and values of wetlands.

ENV Policy 3.1.1 Identification and Categorization of Wetlands
The County shall require that the presence of wetlands be identified within the review processes of Developments of Regional Impact, Land Use Amendments, Rezoning applications and preliminary site plans. The type (i.e. Category I or II as defined below) of wetlands shall also be indicated by the applicant and reviewed for accuracy.

All wetlands are identified on both the proposed Concept Plan and on the FLUCCS map included within the Environmental Assessment Report enclosed as Exhibit 8.

ENV Policy 3.1.3 Wetland Categories
Category I

Category I wetlands are those wetlands that are considered critically necessary to sustain the health of the County's environment and shall mean those wetlands that meet at least two of the following criteria:

1. Any wetland of any size that has a permanent surface water connection to natural surface waterbodies with special water classifications, such as an Outstanding Florida Water, an Aquatic Preserve, or Class I or II waters. A natural

hydrological connection that has been enhanced by human technology will be considered a connection under this category.

None of the wetlands on-site have a direct, or indirect, surface water connection to a natural surface waterbody.

2. Any wetland of any size that has a direct connection to the Floridan aquifer by way of an open sinkhole or spring.

None of the wetlands on-site have a direct connection to the Floridan Aquifer.

3. Any wetland of any size that has functioning hydroperiods with minimal human disturbance and provides critical habitat for listed species.

The wetlands on-site have been severely hydrologically altered as a result of the historical agricultural practices on-site and do not provide critical habitat for any Federal or State listed species.

4. Any wetland of any size whose functioning hydroperiods are connected via a direct natural surface water connection to parks or conservation lands.

The hydroperiods of the on-site wetlands do not contain a surface water connection to parks or conservation lands.

5. Any wetland of any size where downstream or other hydrologically connected habitats are significantly dependent on discharges from the wetland.

The wetlands on-site are not hydrologically connected to any downstream flows.

Wetlands meeting two or more of the above criteria must have no more than 30 percent coverage of exotic invasive vegetation. The County shall limit the removal, alteration, encroachment, dredging, filling, or changes to the natural hydroperiod or water quality (hereinafter collectively referred to as "impacts") within Category I wetlands, regardless of any other regulatory agency authorization, to cases where no other feasible and practicable alternative exists that will permit a reasonable use of the land. The protection, preservation, and continuing viability of Category I wetlands shall be the prime objective of the basis for review of all proposed impacts.

<u>Category II</u>
Category II wetlands shall mean those wetlands that consist of isolated wetlands or formerly isolated wetlands which by way of man's activities have been directly connected to other surface water drainage. Impacts within Category II wetlands

shall first be avoided. Impacts that can not (sic) be avoided may be mitigated as permitted by State and Federal permitting agencies. The County shall review the reasoning for any proposed impacts and may prohibit such if it determined to be contrary to the public interest.

The submitted site plan proposes 1.56 acres of impacts to wetland W-5. This proposed impact represents approximately 11% of the total wetland area on-site. During the site planning process, multiple alternative site plan iterations were examined in an attempt to avoid all wetland impacts on site. The central location of wetland W-5 makes it technically impractical and therefore, virtually impossible to avoid impacts without losing a significant portion (up to 30%) of the total landfill area. Unlike a standard residential or commercial development in which the preservation of a wetland results in the loss of only the acreage of the wetland and associated upland buffer, the sloping requirements of a landfill make it unfeasible to avoid the wetland and still maintain a viable project.

Wetland W-5 is a severely hydrologically altered wetland with extensive coverage by exotic and nuisance vegetation, well within the historical citrus grove footprint, and provides very little ecological function. To offset the impacts to W-5 associated with the proposed site plan, the applicant is proposing the preservation and enhancement of 12.39 acres of wetlands W-1, W-2, W-3 and W-4 as outlined in the Mitigation/Monitoring Plan. These wetlands currently exhibit significant coverage by exotic/nuisance vegetation and altered hydrology. The enhancement of these wetlands, supported by the implementation of the long-term maintenance and monitoring plan will result in a functional gain far greater than the minimal loss of function associated with the impact to wetland W-5 and ultimately a net ecological benefit for the area.

ENV Policy 3.1.5: All Wetlands Impact Limitations
The County shall limit impacts in wetlands to the following:

1. Development of parcels of land created prior to June 15, 2010 only if adequate uplands do not exist to support the footprint of the proposed use – impacts shall be limited to the minimal area necessary to support the proposed use. Sewer shall be utilized unless adequate spacing exists to allow a distance separation of at least 100 feet between the Onsite Sewage Treatment and Disposal system (OSTDS) and the delineated edge of the wetland. Contiguous parcels under same ownership shall be consolidated to minimize wetland impacts to Category I and II wetlands.

2. Redevelopment of previously permitted structures provided all development occurs within the footprint of the original structure.

3. Activities necessary to prevent or eliminate a public hazard.

4. Activities that provide a direct benefit to the public at large that would exceed any public loss as a result of the activity, such as removal of exotic species.

5. Passive, resource oriented activities for which wetland functions and values are the primary attraction.

6. Agriculture, provided the overall ecological integrity of the wetlands community shall be maintained as follows:

a. Viable populations of protected or listed species found onsite can be maintained onside;

b. Harvests are planned to provide for varying age and height diversity, supporting a variety of vegetative successional stages within the overall wetland ecosystem;

c. The natural hydrology and hydroperiod of wetlands are not significantly modified on a long-term basis and State water quality standards are not violated; and

d. There is no conversion of wetland systems to upland systems.

7. Non-commercial water dependent uses and structures such as boardwalks, docks or boat ramps constructed in a manner to minimize impacts to wetlands and aquatic resources.

8. Linear facilities serving a public need that cannot be reasonably located outside of all wetlands may cross or occur in wetlands provided the proposed facility impacts the least sensitive portions (i.e., narrowest, most impacted, etc.), bridging may be considered as a means to minimize impacts. Linear facilities can include boring or directional drilling.

9. Stormwater treatment or tertiary treatment of wastewater maybe allowed only for innovative designs which demonstrate that:

a. The continued natural functioning of the wetland system will be maintained or improved.

b. The natural hydroperiod of the wetland will be maintained.

c. Water quality, vegetation, and aquatic lifeforms will be maintained or improved.

d. All substances that could adversely impact water quality, vegetation and aquatic lifeforms will be removed or treated prior to discharge to the wetland system.

e. The wetland's ability to assimilate any nutrients in the effluent discharged to the wetland system will not be exceeded.

f. The project owner or operator agree to a monitoring program of the wetlands system, at their expense and any degradation of the wetland system that occurs during the monitoring period due to project design failure shall be corrected at the owner or operator's expense.

The proposed wetland impact is permitted under criteria 1 and 4, above. In compliance with criteria 1, during the site planning process, multiple alternative site plan iterations were examined in an attempt to avoid all wetland impacts on site. The central location of wetland W-5 makes it technically impractical and therefore, virtually impossible to avoid impacts without losing a significant portion (up to 30%) of the total landfill area. Unlike a standard residential or commercial development in which the preservation of a wetland results in the loss of only the acreage of the wetland and associated upland buffer, the sloping requirements of a landfill make it unfeasible to avoid the wetland and still maintain a viable project.

The project will maintain at least a 100 foot separation between any OSTDS and delineated edge of a wetland.

There are no contiguous parcels owned by either the applicant, Calusa Green LLC or the owner, Calusa Growers, LC.

The proposed wetland impacts are also permitted by criteria 4. Wetland W-5 is a severely hydrologically altered wetland with extensive coverage by exotic and nuisance vegetation, well within the historical citrus grove footprint, and provides very little ecological function. To offset the impacts to W-5 associated with the proposed site plan, the applicant is proposing the preservation and enhancement of 12.39 acres of wetlands W-1, W-2, W-3 and W-4 as outlined in the Mitigation/Monitoring Plan. These wetlands currently exhibit significant coverage by exotic/nuisance vegetation and altered hydrology. The enhancement of these wetlands, supported by the implementation of the long-term maintenance and monitoring plan will result in a functional gain far greater than the minimal loss of function associated with the impact to wetland W-5 and ultimately a net ecological benefit for the area.

ENV Policy 3.1.6 Incompatible Uses

Where adequate land area exists to support the proposed use, the County shall require a 50 foot, undeveloped buffer between any commercial intensive and industrial land uses, including associated uses such as parking lots and storage areas, and any waterways, wetlands, or lakes.

The Comprehensive Plan and County zoning classifies the proposed landfill as an agricultural use and not as a commercial or industrial use. Nevertheless, a 50 foot, undeveloped buffer is provided around all existing wetlands and around all wetlands proposed to be created.

ENV Policy 3.1.7 Prohibited Uses
The use, storage, transmission or generation of hazardous substances or substances which may artificially accelerate the eutrophication of wetlands and waterbodies, is prohibited within 200 feet of wetlands.

Hazardous substances will not be used, stored or transmitted within 200 feet of any wetland. The site plan submitted for Site Plan Review has been modified. No portion of the Class I landfill is located within 200 feet of any wetland on the Concept Plan submitted with the Application for Planned Development Rezoning.

Infrastructure: Solid Waste Goals, Objectives and Policies

MSW Objective 2.3 Solid Waste Facility Siting
To site solid waste collection and disposal facilities in a manner that protects the natural and community resources of the County.

MSW Policy 2.3.2 Siting Requirements
The County shall require any proposed solid waste collection and disposal facilities to be sited in accordance with all applicable land development regulations and other local, regional, State, or Federal regulations.

Charlotte County has implemented MSW Objective 2.3 and Policy 2.3.2 through its Code of Ordinances, Section 1-12-108, Landfill Siting Standards. The proposed Calusa Green Landfill complies with the requirements of the Landfill Siting Standards as follows:

> ***(1) Buffering. All such facilities shall provide a landscaped buffer zone of at least fifty (50) feet around the entire perimeter of the facility site. Additional buffering may be required such as an increased landscaped buffer zone, spatial separations, lakes, berms or a combination thereof if the county finds such is necessary to meet the intent of the article. The appropriate buffer, landscape type and planting requirements shall be made part of the development order submitted to the BCC for approval.***

Calusa Green is approximately 3 miles north from Country Road 74. The portions of Neil Road and Chiquita Drive that intersect at the South West corner of the property are both private roads. The closest residence is over a mile away. A 25 foot PD Buffer and a 50 foot Landscape Buffer Zone will be provided, as shown on the proposed Concept Plan. The site already is buffered from public view by extensive citrus groves and agricultural areas, as shown on the aerial photograph in Figure 2. The planting scheme we have presented is appropriate to the rural lands we are buffering to and is consistent with applicable County codes.

(2) Performance standards. All such facilities shall provide evidence that the industrial performance standards set out in section 3-9-81 of the County Code will be met.

Performance Standards

Calusa Green will comply with the industrial performance standards in Section 3-9-81 of the County Code. These standards are also detailed in the individual Operating Plans for the Class I, C&D, Recycling and Compost operations.

Radioactive emission. Radioactive emissions are not normally associated with the operation of a Class I landfill in Florida. No radioactive emissions are anticipated from the proposed facility.

Electromagnetic interference. Electromagnetic interference is not normally associated with the operation of a Class I landfill. The Calusa Green facility will not cause any electromagnetic interference.

Visual Emissions and Dust Control. Visual emissions will not be in excess of standards set forth in current County, State, or Federal air regulations. The Facility plans to control dust through a variety of methods. First, dust will be controlled through the paving of the main access roads and high traffic areas outside of the disposal footprint. These areas include the entrance, scales/scale house, facilities access road, community convenience drop-off areas, and facilities parking. Due to the type of heavy equipment used within the disposal area, paving of the internal access roads is not practical. Gravel and/or asphalt millings will be used instead in these areas. During operation of the landfill, dust control will be accomplished by the application of water through spray nozzles from a water truck. The frequency of application of water for dust control will depend on site conditions and specific operations being performed. When necessary, water will be applied on all heavily used roads including the paved

roads. The main access ramp will also be regularly sprayed to control dust as required.

Fumes; vapors; gases. The construction and operation of the Calusa Green facility will not emit fumes, vapors or gases that cause danger to humans, animals, vegetation, or property. The landfill gasses produced at the facility will be collected and controlled in an active gas management system in accordance with the EPA and FDEP regulations. The landfill gasses also will be controlled with the use of daily cover material and best management practices approved by the FDEP.

Sewage; industrial waste. Domestic sewage from the site administration buildings and operation buildings will be treated in a County Health Department-approved septic system. The landfill leachate (i.e., liquid resulting from the infiltration of rainwater through the solid waste in the landfill) will be collected in a state-of-the-art liner and leachate collection system. The collected leachate will be stored temporarily in an environmentally sound, double lined containment system until the leachate is taken off-site by truck for proper management at a wastewater treatment plant or other properly licensed facility. All of the leachate and solid waste at the Calusa Green facility will be handled in compliance with an FDEP approved operations plan.

Vibration Control. Based on experience from observed operations at other Class I, Class III and C & D disposal facilities in the state, it is highly unlikely that equipment used at the proposed facility will cause any detectible vibrations. A variety of trucks and trailers will deposit material onto the working face of the mound, far removed from the property boundary. Even though vibrations are not expected due to the type of equipment used and distance from operations to the property line, the project must comply with the Land Development Code regarding vibrations.

Heat, cold, dampness or movement of air. The Calusa Green project will not include any activities that produce adverse effects on the temperature, motion or humidity of the atmosphere.

Noise Control. Operations will be focused to the interior of the site. Considerable distance will exist between the active waste dumping area and the property line. All equipment powered by internal combustion engines will have mufflers installed and maintained in good repair. Landscaping will be installed around the perimeter of the site to aid in the deflection and absorption of sound. Screening berms will also be used along select areas to further deflect sound inward and upward.

Construction equipment typically used at a landfill is rated at 80 - 85 decibels (dB) at 50 feet. The noise at the property line from the waste dumping area is expected to be a decibel level of 60 dB. To put this sound level in perspective, a normal conversation has a decibel range of 60 - 70 dB at 3 feet.

Odor Control. Calusa Green will have in place a strict Odor Control and Remediation Plan to prevent objectionable odors beyond the landfill property boundary. The Operator will conduct daily perimeter odor observations to detect and document any potential odor problem. Immediate actions will be taken by the Operator if perimeter odors are detected, in an effort to prevent any off-site odor detection.

The primary method for controlling odors at the landfill will be the use of soil or alternate daily cover. A 6-inch thick initial earth cover will be placed on top of all exposed waste on the working face, at the end of each day's operation. Although state regulations require daily covering for Class I disposal sites, Calusa Green has committed to applying additional cover daily as necessary. Additionally, they will implement a routine odor-monitoring program to determine the time and extent of any off-site odors.

If objectionable odors are detected beyond the landfill property boundary, Calusa Green will take immediate action to eliminate them. If after 5 days, the odor is still present, the facility will immediately implement the Odor Remediation Plan. Within 60 days of an observed odor exceedance, the facility will complete the remediation, unless otherwise directed by FDEP. Odor remediation methods may include application of additional cover, masking agents, neutralizing agents, a mister system, or early landfill gas recovery.

Glare. Minimal use of low-level security and street lighting will be provided during non-daylight hours. The Facility shall comply with the County's lighting ordinances. No other sources of glare will exist as a result of the activities associated with this facility.

Fire and Explosive Hazards. While fires and explosions are not common place to the operation of a landfill, the possibility exists. A comprehensive Fire Control Plan will be developed in coordination with the FDEP and County Fire Department.

Fires that originate in landfills are primarily extinguished by the application of soil. Supplemental fire protection will be furnished by application of water by landfill personnel and the Fire and Rescue Department. The Fire Department will be notified immediately of any landfill fires. An emergency contact sign with a 24-

hour contact phone number available will be posted at the entrance so it is visible to emergency vehicles.

On-site fire prevention facilities will include the following:

On-site equipment (dozer) and fill dirt to extinguish fires on working face.

Fire extinguishers mounted in the cab of all heavy equipment and in the scale house.

Radio communication to notify personnel of a fire.

Soil for firefighting purposes is stockpiled near the working face at all times. If additional soil is needed, it will be borrowed from the closest unexcavated area of the site to the fire. In the event of a fire, incoming disposal trucks will be directed toward another area of the landfill, so a temporary active face can be established. Once the fire is fully extinguished, appropriate soil cover will be applied to the temporary waste fill area and operations will continue at the original active face. If the fire is extensive and a temporary active face cannot be established, incoming disposal trucks will be redirected to another landfill.

Any hot load found will be dumped away from the active working face. The load will immediately be covered with soil if a fire is imminent. Once the fire is extinguished, the load will be pushed and spread using a dozer to allow the load to be inspected. The waste will not be disposed into the active working area until it has cooled completely and the fire hazard has been eliminated.

Litter Control. Placement of soil cover will be the primary means of controlling litter. If blowing litter is observed, employees of the Facility will patrol the site as needed and pick up blowing debris and dispose of it in appropriate containers onsite. In addition, the employees will patrol the road and haul route weekly to pick up litter from vehicles hauling material to and from the site. Temporary fencing to contain litter at the working face of the landfill will be used as needed to mitigate blown litter.

All open vehicles delivering waste to the landfill must have a tarp or some type of enclosure to prevent litter on the site as well as all roads within the County. All open-top vehicles entering the site without a tarp or enclosure will be warned in writing by the scale operator that a tarp or enclosure is required to transport solid waste within the City and County. Driver and vehicle identification information will be recorded and appropriate action taken toward frequent violators.

Vector Control. A vector, or pest control, plan will be implemented at the proposed landfill to control pests such as flies, rodents, birds, hogs, and coyotes, etc. A vector control plan is a combination of pesticides, coverage of the waste (food source), animal deterrence and site security. Flies and rodents are typically controlled by periodic application of biodegradable pesticides to the open areas of the landfill. Daily soil, or alternate cover, will act to remove direct access from birds, hogs, and coyotes. The chain-link perimeter fence will prevent access to coyotes, hogs, or other animals. If birds become a problem, they will be controlled by either a wire grid system over the working area, ultrasonic sound, or chemical deterrents, such as Bird Commander (grape skin compound). All of these control methods have been successful at similar landfills. A benefit of the landfill's bird attraction is that Bald Eagles are commonly viewed at Florida landfills, and some counties, such as Citrus County, have made bird viewing trails for eagle viewing.

Truck Traffic Control. The proposed Calusa Green Landfill will have a traffic flow plan within the site to ensure proper speed and direction of customers' trucks. Truck traffic along the road will be controlled to a speed limit of 25 mph. If truck traffic control becomes a problem, an off-duty Sheriff's patrol may be implemented during peak truck traffic periods. Trucks will not be allowed to stage onto the road prior to Calusa Green opening. Any customer truck drivers found to be breaking the speed limit or to be driving in an unsafe manner will be banned from the landfill.

Handicap Accessibility. Calusa Green will have an office and administrative center that is served by a hard surfaced parking lot. The parking lot will provide a handicap parking space and an accessible path to the building. The scale house will be handicap accessible in the event the scale master is handicapped. We have also provided an employee parking lot at the maintenance facility that also has a handicap parking space.

(3) Minimum distance requirements. No new facility shall be constructed in closer proximity to specified land uses or designated areas than the minimum distances as follows:

a. Within one-half mile of lands which are, at the time of initial application, in residential use at a density in excess of two (2)units per acre.

The project is more than one-half mile from any lands in residential use at a density in excess of 2 units per acre. The closest in residential use at a

density in excess of 2 units per acre is approximately 2.7 miles at the Paradise Park mobile home community.

b. Within one-half mile of any school, park or hospital.

The project is more than one-half mile from the nearest school, park or hospital. The closest school, park or hospital is the Cecil Webb Preserve, approximately nine (9) miles from the subject property.

c. Within two hundred (200) feet of any body of water (except canals used to lower on-site water tables, borrow pits and other bodies of water contained completely within the site).

The project is more than 200 feet from a waterbody that is not contained completely within the site. The closest waterbody is approximately 3000 feet from the project site.

d. Within one thousand five hundred (1500) feet of any well head supplying a public water system of a public or private utility company.

The project is more than 1500 feet from the nearest well serving a public water system. The closest well serving a public water system is approximately 2.7 miles from the subject property at the Paradise Park mobile home community. Paradise Park's system is privately owned and operated.

(4) Excluded areas. No such facility shall be constructed in any special surface water overlay district.

The Calusa Green solid waste facility is not located within a special surface water overlay district.

(5) *Setbacks. Placement of structures and operating areas shall conform to the following setbacks.*

a. No part of any incinerator shall be located within eight hundred (800) feet of any property line.

At this time, Calusa Green does not anticipate having an incinerator as a component of the proposed facility. The facility will have a biosolids composting area and an area where machinery will be used for chipping and shredding vegetative waste. The composting area and chipping and

shredding operations will not involve any potentially negative characteristics of incineration such as combustion derived air emissions. Additionally, these operations will exceed the 800 foot setback requirements.

b. No processing area of any construction and demolition debris management facility shall be located within two hundred fifty (250) feet of any property line.

Processing operations for any C&D debris is greater than 250 feet from any property line. Please refer to the concept plans.

c. No storage, processing, composting or disposal area of any vegetative waste management facility shall be located one hundred (100) feet of any property line; and, in addition, no machinery or equipment for the chipping or shredding of vegetative waste shall be located within eight hundred (800) feet of any property line.

There will be no storing, processing, composting or disposal area of any vegetation waste within 100 feet of any property line. The facility will have a biosolids composting area and an area where machinery will be used for chipping and shredding vegetative waste. These operations will exceed the 800 foot setback requirements.

(6) *Other standards. All such facilities must be located within five (5) miles of a full-service station. The provision of on- site fire/rescue capability acceptable to the county fire marshal may exempt a proposed facility from this requirement.*

Calusa Green is located farther than 5 miles from a full-service fire station. The facility will provide on-site fire/rescue services to satisfy the County fire marshal. At a minimum, the site will have large on-site stormwater ponds with dry hydrant stand pipes that can provide water for firefighting. Calusa Green also will maintain stockpiles of soil near the working face of the landfill. These stockpiles can be used to control fires, if any.

MSW Policy 2.3.1 Needs Analysis
The County shall require any proposed solid waste disposal facility to prepare a Needs Analysis that supports the added disposal capacity proposed is required in order to service County residents.

The required Needs Analysis is enclosed as Exhibit 15.

WSW Policy 4.1.2 Hazardous Materials and Potable Water Supplies
The County shall not permit land uses in which hazardous materials (such as petroleum products or chemical or biological wastes are produced or stores, or land uses which may have an adverse impact on central potable water supplies for public consumption, in areas where their presence would adversely impact groundwater resources, recharge areas, or watersheds that drain into surface water supplies.

The solid waste management facility will not adversely impact groundwater resources, recharge areas or watersheds that drain into surface water supplies, as provided in the proposed stormwater management system design and detailed in the Hydrogeological Investigation Report prepared by Progressive Water Resources (Exhibit 16). The wet detention stormwater management system for the landfill and associated site improvements will be designed to exceed the rules of the Florida Department of Environmental Protection, specifically Chapter 62-330.200(3), FAC. Pursuant to the requirements of the South Florida Water Management District, the stormwater management system will be designed to retain the 100-year, 72-hour storm event with no surface discharge to surface waters. In addition, the stormwater management system can accommodate the 500-year, 24-hour storm event with four foot of freeboard. Emergency spillways to protect the system from overtopping will be designed to discharge into the contained wetland system north of the site. In the rare event of a stormwater discharge, it must meet state surface water quality standards. The perimeter berms will be designed with adequate freeboard to prevent overtopping from waves generated by a 120 mile per hour wind on top of the design stage, at a minimum.

There will be no adverse impact to recharge areas or watersheds. Information derived from the Charlotte County Comprehensive Plan Future Land Use Element, Map No. 6: Prime Aquifer Recharge Areas designates the Calusa Green Project Site within the area shown as "No recharge to very low recharge (0.0 to 1.0 inches per year) to the Upper Florida Aquifer". Localized information detailed in both the Hydrogeological Investigation Report prepared by Progressive Water Resources (Exhibit 16) and the narrative at Exhibit 16-1 confirms the vicinity of the subject site is likely to provide virtually "no recharge" to the upper Floridan Aquifer.

WSW Policy 4.1.3 Sewage Sludge Disposal
The County shall not permit the disposal of sludge in areas where it would adversely impact groundwater resources, recharge areas, or watersheds that drain into surface water supplies, unless such disposal is consistent with regulations established by FDEP.

The solid waste management facility will not adversely impact groundwater resources, recharge areas or watersheds that drain into surface water supplies, as provided in the proposed stormwater management system design and detailed in the Hydrogeological

Investigation Report prepared by Progressive Water Resources (Exhibit 16). The wet detention stormwater management system for the landfill and associated site improvements will be designed to exceed the rules of the Florida Department of Environmental Protection, specifically Chapter 62-330.200(3), FAC. Pursuant to the requirements of the South Florida Water Management District, the stormwater management system will be designed to retain the 100-year, 72-hour storm event with no surface discharge to surface waters. In addition, the stormwater management system can accommodate the 500-year, 24-hour storm event with four foot of freeboard. Emergency spillways to protect the system from overtopping will be designed to discharge into the contained wetland system north of the site. In the rare event of a stormwater discharge, it must meet state surface water quality standards. The perimeter berms will be designed with adequate freeboard to prevent overtopping from waves generated by a 120 mile per hour wind on top of the design stage, at a minimum.

There will be no adverse impact to recharge areas or watersheds. Information derived from the Charlotte County Comprehensive Plan Future Land Use Element, Map No. 6: Prime Aquifer Recharge Areas designates the Calusa Green Project Site within the area shown as "No recharge to very low recharge (0.0 to 1.0 inches per year) to the Upper Florida Aquifer". Localized information detailed in both the Hydrogeological Investigation Report prepared by Progressive Water Resources (Exhibit 16) and the narrative at Exhibit 16-1 confirms the vicinity of the subject site is likely to provide virtually "no recharge" to the upper Floridan Aquifer.

Notwithstanding the above, the proposed biosolids compost facility will be consistent with regulations established by FDEP as detailed in the Operations Manual found at Exhibit 17.

Infrastructure: Groundwater and Aquifer Recharge Goals, Objectives and Policies

AQR GOAL 1 GROUNDWATER AND AQUIFER RECHARGE
Maintain the long-term quality of groundwater through the management of land development.

The Southwest Florida Water Management District Groundwater Resource Availability Inventory Report for Charlotte County specifically found that:

"The Intermediate and Floridan aquifers have a very low susceptibility to contamination due to thick overlying confining layers which impede contamination."

The confinement characteristics of the sediments and related geology underlying the Calusa Green Project Site support the conclusion of "very little to no recharge", and

therefore, strongly support the very low potential for groundwater contamination to the Intermediate and upper Floridan aquifer systems. The proposed project is designed to include an impervious liner that is intended to further protect again and thus preclude adverse impacts to groundwater of the Surficial Aquifer System. Accordingly, the proposed land use is not anticipated to cause groundwater contamination and will help to maintain long-term quality of the groundwater beneath the site, in compliance with AQR Goal No. 1.

AQR Objective 1.1 Natural Groundwater Recharge Protection
To protect the function of natural recharge areas and natural drainage features at a level consistent with the long-term public good and the preservation of the environment.

Calusa Green is located on property historically used to cultivate citrus. The existing surface water drainage features, composed of man-made ditches and canals, were authorized by the South Florida Water Management District under Environmental Resource Permit No. 08-00006-S. The site ultimately drains to a Class III waterbody.

Hydrogeologic information collected in the vicinity of the Calusa Green Project Site suggests that there may be little if any recharge, i.e., nearly zero. This determination is supported by the thick, low permeability sediments that comprise the confining unit above the upper Floridan Aquifer, the minimal differential between the water levels of the Surficial Aquifer and the upper Floridan Aquifer Systems, the highly mineralized nature of the upper Floridan water quality, and the proximity of the site to discharge areas. These inherent characteristics protect the water resources and safeguard environmental systems in accordance with AQR Objective 1.1

AQR Policy 1.1.1 Prime Aquifer Recharge Protection
The County shall limit impervious surface area within areas of prime aquifer recharge (FLUM Series Map #6) to ten percent, thereby allowing for the greatest amount of water to infiltrate the ground. Allowable uses include rural residential development and agricultural and resource conservation activities. Group III Excavations are prohibited.

Information derived from the Charlotte County Comprehensive Plan Future Land Use Element, Map No. 6: Prime Aquifer Recharge Areas designates the Calusa Green Project Site within the area shown as "No recharge to very low recharge (0.0 to 1.0 inches per year) to the Upper Florida Aquifer". By definition, therefore, if the site is in an area of no to very low recharge, the map cannot be interpreted to state that the property is in a "prime" recharge location. Localized information confirms the vicinity of the subject site is likely to provide virtually "no recharge" to the upper Floridan Aquifer. See the attached narrative at Exhibit 16-1 describing aquifer recharge in Charlotte County.

In addition, the area within northeastern Charlotte County designated on Map No. 6 as having "no recharge to very low recharge" is approximately 5,860,791 acres in size. Using this area, the 554 acre Calusa Green Project Site represents approximately 0.0095 percent, and is therefore considered to be de minimus. In summary, the project will have virtually zero impact to the recharge of the upper Floridan Aquifer and is therefore in compliance with AQR Policy 1.1.1. This determination is based upon objective hydrogeologic and hydrologic information collected by Progressive Water Resources, LLC (PWR), a Florida Registered Professional Geology firm.

AQR Policy 1.1.2 Prime Aquifer Density and Intensity Limitations
The County shall protect groundwater resources by maintaining maximum density at the levels allowed at the time of adoption of this comprehensive plan in areas of prime aquifer recharge. Increases in intensity and density are prohibited. Increases in intensity do not apply to changes in agricultural uses.

As described above and in the narrative on aquifer recharge attached as Exhibit 16-1, the Calusa Green site is not an area of prime aquifer recharge. Nonetheless, no changes in density are proposed. An analysis of any increases in intensity is not required. The applicant does not accept staff's determination that the proposed solid waste management facility is not an agricultural use.

A solid waste management facility, under the 2050 Plan, is considered an agricultural use. There is no other land use category in which landfills are permitted. Further, the definition of "Land Use" in the 2050 Plan reads as follows:

> The development that has occurred on the land, the development that is proposed by a developer on the land, or the use that is permitted or permissible on the land under an adopted comprehensive plan or element or portion thereof, land development regulations, or a land development code, as the context may indicate. (Emphasis added)

Public services and facilities are a permitted use in Agriculture. Additionally Charlotte County's land development regulations require privately owned solid waste management facilities to be placed only on lands designated as Agriculture in the comprehensive plan. Therefore, by definition, a solid waste management facility is an Agriculture land use. As this is a change from one type of use permitted by the Agriculture land use category to another use permitted by the Agriculture land use category, increases in density to not apply.

AQR Policy 1.1.3 Aquifer Protection Modifications

Uses prohibited by AQR Policy 1.1.1 and 1.1.2 may be allowed on a case by case basis by the Board of County Commissioners if it can be demonstrated through a science-based analysis, approved in writing by the appropriate Water Management District (WMD), that the proposed use will have no negative impact on the quantity or quality of water entering the aquifer.

As explained in the response to AQR Policy 1.1.1, Calusa Green is not located in an area of prime aquifer recharge and, therefore, is not prohibited by AQR Policy 1.1.1 or 1.1.2.

AQR Policy 1.1.4: Maintenance of Natural Flow
The County shall require that natural hydroperiods, flows and water quality will be maintained or improved when development activity occurs upon a site anywhere in the County.

The wet detention stormwater management system for the landfill and associated site improvements will be designed to exceed the rules of the Florida Department of Environmental Protection, specifically Chapter 62-330.200(3), FAC. Pursuant to the requirements of the South Florida Water Management District, the stormwater management system will be designed to retain the 100-year, 72-hour storm event with no surface discharge to surface waters. In addition, the stormwater management system can accommodate the 500-year, 24-hour storm event with four foot of freeboard. Emergency spillways to protect the system from overtopping will be designed to discharge into the contained wetland system north of the site. In the rare event of a stormwater discharge, it must meet state surface water quality standards. The perimeter berms will be designed with adequate freeboard to prevent overtopping from waves generated by a 120 mile per hour wind on top of the design stage, at a minimum.

There will be no adverse impact to recharge areas or watersheds. Information derived from the Charlotte County Comprehensive Plan Future Land Use Element, Map No. 6: Prime Aquifer Recharge Areas designates the Calusa Green Project Site within the area shown as "No recharge to very low recharge (0.0 to 1.0 inches per year) to the Upper Florida Aquifer". Localized information detailed in both the Hydrogeological Investigation Report prepared by Progressive Water Resources (Exhibit 16) and the narrative at Exhibit 16-1 confirms the vicinity of the subject site is likely to provide virtually "no recharge" to the upper Floridan Aquifer.

b. The existing land use pattern in adjacent areas.

The surrounding areas are all agricultural lands used for citrus cultivation or grazing.

c. The population density pattern and possible increased load on public facilities, such as schools, utilities, and roads.

The subject property is designated as Agriculture in the 2050 Plan. Its density is one (1) unit per ten (10) acres. The proposed landfill use will utilize none of the existing density and will actually eliminate 55 units of density. There will be no school impacts or impacts to public utilities as the site will be served by a well and septic system. Transportation impacts were analyzed by Florida Transportation Engineering, Inc. The Traffic Impact Study is provided as Exhibit 9. The study found that the traffic generated by the proposed landfill will not reduce level of service beneath the adopted standard.

d. Would changed conditions make the passage of the proposed amendments appropriate?

The land on which the landfill is proposed was historically used for citrus cultivation. However, most of the citrus trees were removed as part of the State of Florida's citrus canker eradication program. The majority of the land is now classified as Fallow Crop Land (See FLUCCS Map provided in Exhibit 8).

e. Would the proposed change adversely influence living conditions or property values in adjacent areas?

The proposed change will not adversely influence living conditions or property values in adjacent areas. The landfill will have no adverse impacts to ground or surface water, as more fully described in the Hydrogeological Investigation Report prepared by Progressive Water Resources (Exhibit 16). The Operations Manual provided in Exhibit 17 details the procedures that will be utilized to control litter, odor, pests and traffic. The site will be buffered from adjacent areas which are all utilized primarily for citrus cultivation. Agricultural activities on adjacent properties will be unaffected by the landfill operations.

Charlotte County has adopted a Landfill Siting Ordinance, codified in Section 1-12-108 of the Charlotte County Code of Ordinances, the intent of which is to ensure that landfills are located in areas where they will have no adverse effects on living conditions or property values in adjacent areas. The site complies with the standards of the Landfill Siting Ordinance as set forth in the response to standard a., more particularly the explanation of consistency with MSW Objective 2.3 and Policy 2.3.2.

f. Would the proposed change affect public safety?

The proposed change will not affect public safety. Traffic will remain within adopted

levels of service on adjacent roadways. Fires and explosions are not common place to the operation of a landfill. Nevertheless, a comprehensive Fire Control Plan will be developed in coordination with the Florida Department of Environmental Protection and Charlotte County Fire and EMS.

A detailed firefighting plan is included in the Operations Manual (Exhibit 17).

g. Would the proposed change reduce light and air to adjacent areas?

The proposed change will not reduce light and air to adjacent areas. The proposed height of the landfill is 190 feet. This height will be obtained in phases over a period of 30 years. The footprint of the landfill will be located no closer than 150 feet from the northern PD boundary, 317 feet from the eastern boundary, 871 feet from the southern boundary and 1,346 feet from the western boundary.

h. Are there substantial reasons why the property cannot be used in accordance with the existing zoning?

The property ceased to be used for citrus cultivation, its historic use, as a result of citrus canker regulations. Eventually, citrus may be replaced on the site. Because the project will be developed in phases over a 30 year period, the applicant intends to lease unused portions of the site to the adjacent landowner who may utilize the land for citrus cultivation until such time as the land is needed by the landfill. Further, as the needs analysis demonstrates, there is a need for this use in Charlotte County and this location fulfills an essential public service.

Additionally, a landfill is in accordance with the existing zoning. The site is zoned AG, which permits a landfill by special exception. However, the Landfill Siting Ordinance requires that the property be rezoned to Planned Development.

received 8/17/12

AQR Policy 1.1.1 Prime Aquifer Recharge Protection

The County shall limit impervious surface area within areas of prime aquifer recharge (FLUM Series Map #6) to ten percent, thereby allowing for the greatest amount of water to infiltrate the ground. Allowable uses include rural residential development and agricultural and resource conservation activities. Group III Excavations are prohibited.

As stated in the Charlotte County 2050 Plan the ultimate goal of AQR Policy 1.1.1 is "..., allowing for the greatest amount of water to infiltrate the ground." Clearly the intent of this statement by the County means that they want to reduce the amount of stormwater runoff leaving the Prime Aquifer Recharge zone, thereby allowing the stormwater to infiltrate into the ground. By limiting the development to 10% the County is assuming that the other 90% of the stormwater will infiltrate back into the ground.

In stormwater design, we model the existing conditions of a development site to determine the amount of stormwater runoff in certain rainfall events. This modeling uses the slope of the land, the vegetative cover and condition of the project site. In the chart below you will see we have run the ICPR model for a 547 acre parcel that is relatively flat improved pasture land which is a very conservative assumption compared to fallow citrus groves. The rainfall events shown range from a 1" average daily rain to a 100 Year, 14" storm. You can see that even in the daily rains, over 1 million gallons will run off the site and into the drainage swales and ditches downstream while over 13 million gallons are absorbed into the ground. Considering the 100 year storm event, almost 169 million gallons will run off the site while 39 million gallons are absorbed.

By contrast, with the stormwater management system designed for Calusa Green, all 208 million gallons will be contained within the boundaries of the project site and forced to percolate back into the ground.

Storm Event	3Yr; 24-Hr	25Yr; 24-Hr	100-Yr; 72-Hr	1 inch
Amount of Rain (in)	4.25	7.25	14	1
Basin	547.07	547.07	547.07	547.07
CN	80	80	80	80
Tc	90	90	90	90
Runoff (in)	2.249	4.923	11.374	0.083
Runoff (cfs)	249.788	554.937	991.579	5.132
Runoff (Ft^3)	4,465,609	9,776,064	22,587,172	165,393
Runoff (gal)	33,404,991	73,129,844	168,963,337	1,237,222
Recharge Water				
inches	2.001	2.327	2.626	0.917
cubic feet	3,973,730	4,621,124	5,214,899	1,821,044
gallons	29,725,484	34,568,317	39,010,056	13,622,323
cfs per acre	0.46	1.01	1.81	0.01

In addition to the data stated above, we contacted the FDEP stormwater reviewer for solid waste management facilities for confirmation of the design approach used for landfills in regards to stormwater runoff. He confirmed that the finished landfill with the vegetated soil cap will absorb 3" to 4" of a rainfall event prior to experiencing runoff. And as required, that runoff is contained in the designed stormwater facility to be allowed to percolate back into the ground. Please see the FDEP correspondence below.

From: McLaurin, Albert [mailto:Albert.McLaurin@dep.state.fl.us]
Sent: Wednesday, August 15, 2012 3:41 PM
To: 'Gary Bayne'
Subject: RE: Calusa Green - Conversation

Mr. Bayne,

Basically, your understanding of our conversation is correct.

The final cover design of a landfill is to limit the amount of moisture getting into the waste and provide erosion control for the soil cover by use of a vegetative cover. The vegetative cover promotes surface water runoff and the vegetation uptakes moisture that may penetrate the vegetation/soil cover layer over the final cover geomembrane which provides the a barrier for moisture getting into the waste. The vegetation root zone is designed to not penetrate the geomembrane cover, as noted in your email. Any excess moisture that penetrates below the root zone of the vegetative cover is allowed to runoff via the final cover drainage layer into the landfill stormwater system. The stormwater calculations would be similar to the normal rule requirements. The landfill should be divided into basins and treated no different than a normal stormwater design.

Regards,

Albert D. McLaurin, P.E.
Acting Environmental Administrator
Florida Department of Environmental Protection
South District Office
2295 Victoria Avenue, Suite 364
P.O. Box 2549
Fort Myers, FL 33902-2549
Phone: 239-344-5605
Fax: 850-412-0590

From: Gary Bayne [mailto:gbayne@sedfl.com]
Sent: Wednesday, August 15, 2012 2:41 PM
To: McLaurin, Albert
Subject: Calusa Green - Conversation

Dear Al,

Thank you for speaking to me this morning and sharing your expertise in storm water management for landfill projects. As I understand our conversation, the landfill footprint is not considered "impervious" by definition (Charlotte County's definition - Impervious surface: A surface which has been compacted or covered with a layer of material so that it is highly resistant to infiltration by water. The term includes streets, roofs, sidewalks, parking lots and similar structures.) nor by storm water calculation due to the two feet of soil cover required to close and cap the landfill.

As we discussed the soil cover absorbs a certain amount of rainfall in the voids and supports the vegetative growth required on top of the hill. Due to the amount of percolation and the ability to support vegetative growth that is required by FDEP the finished landfill is not considered impervious and uses storm water design criteria similar to an open pasture with a clay layer underneath. Also the 2 feet of cover on top of the landfill will absorb approximately 3 to 4 inches rain depending on the rainfall intensity/event before producing runoff. As required for the design any storm water runoff produced by the landfill will need to be retained and treated on site in the storm water ponds to allow for percolation back into the groundwater table as required and set forth in the Environmental Resource Permitting process.

Please confirm that I have accurately summarized our conversation.

I appreciate the time you took to go over an overview of what we are to expect when submitting this project for FDEP review.

Sincerely,

Gary

Gary Bayne, President
Southwest Engineering & Design
660 Charlotte Street, Suite 8
Punta Gorda, Florida 33950
Voice: 941-637-9655
Fax: 941-637-1149
gbayne@sedfl.com

As discussed in the email correspondence above, the vegetative cover that will be placed over the landfill is a pervious surface which will capture stormwater and allow it to percolate into the cover layer. Stormwater not absorbed by the vegetative cover will ultimately run into and be captured by the project's stormwater management facility. This vegetative cover does not meet the definition of impervious surface contained in the 2050 Plan. Further, the stormwater management facility designed

for the proposed Calusa Green project will allow a greater amount of water to infiltrate the ground than the existing site conditions. Consequently, the project is consistent with AQR Policy 1.1.1 because it does not exceed the 10% impervious threshold and because it furthers the stated intent to allow the greatest amount of water to infiltrate the ground.